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FotoNation
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3099 Orchard Drive
San Jose, CA 95134

EXAMINER	
YUAN, KATHLEEN S	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/608,784	STEINBERG ET AL.	
	Examiner	Art Unit	
	KATHLEEN S. YUAN	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,23-33,41-55,63-73 and 81-112* is/are pending in the application.

4a) Of the above claim(s) *16-22,34-40,56-62 and 74-80* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-15,23-33,41-55,63-73 and 81-112* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/2/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The response received on 7/2/2008 has been placed in the file and was considered by the examiner. An action on the merit follows.

Response to Amendment

2. The amendments filed on 2 July 2008 have been fully considered. Response to these amendments is provided below.

Applicant's arguments and Examiner's Response:

3. The applicant has amended the claims to omit previous options in certain limitations in two different groups.

4. The applicant argues that Yamaguchi and Toyama do not teach the determining a correlation with a stored standard or learned face pattern of the one or more group of pixels. The applicant summarizes the references, including stating that "Toyama teaches a relational template module."

5. The examiner disagrees with the applicant that Toyama and Yamaguchi do not teach this limitation. Toyama has the relational template module that determines relationships in the facial regions of the image, and finds if these relationships are according to the template that a face follows, i.e. eye above nose, etc. Therefore, Toyama is teaching determining correlations between a stored standard, the template, or learned face pattern, the template, and the groups of pixels from the image.

6. The applicant further argues that the limitation "b" is not taught by the references.

7. The examiner disagrees. Although the examiner relied upon the references to teach that was omitted in the current amendments in the previous rejection, the references still teaches the exposure of the face limitation, as explained in the rejection below.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 1 states the limitation of "calculating a degree to which location…or combinations thereof thereof, of said face within said image differs from a desired location….white balance, color balance….or combination thereof." The examiner cannot find where the applicant has stated that location, position, orientation, focus, or exposure of the face can be compared to the white balance or color balance in the face. The amendments in the other independent claims are not consistent with the amendment of claim 1. Claim 1 still includes "white balance and color balance" as

something that is compared in step b. If the applicant is consistent and omits this limitation as the applicant has in the other claims, the rejection will be withdrawn.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1, 41, 35, 81, 83, 85 and 99 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 20010005222 (Yamaguchi) in view of U.S. Patent No. 6792135 (Toyama).

12. Regarding claim 1, Yamaguchi discloses a method of generating one or more new digital still images using an original digitally-acquired still image including a face, comprising: (a) identifying one or more groups of pixels that correspond to a face within the original digitally-acquired still image (page 5, paragraph 82 and 85), (b) calculating a degree to which exposure of the face within said image differs from a desired exposure of the face within said image by finding the difference in color balance and white balance which is directly correlated to the exposure of the face (page 5, paragraph 86), (c) based on the identifying of the one or more groups of pixels that correspond to said a face and on the degree as a result of the calculating, selecting a portion of the original still image for processing to include the one or more groups of

pixel, by using a mask (page 5, paragraph 88); and (d) automatically generating values of pixels of one or more new still images based on the selected portion in a manner which always includes the face within the one or more new still images which differ from the original digitally-acquired still image by including at least one group of pixels modified at in white balance and color balance as compared with the one or more groups of pixels identified in the original digitally-acquired still image (page 5, paragraph 92, and fig. 11,item 220). .

Yamaguchi does not disclose expressly that identifying included determining within the one or more groups of pixels a correlation with a stored standard or learned face pattern, of the one or more groups of pixels, or combinations thereof.

Toyama discloses finding a facial region of interest by finding a correlation with a stored standard, the relational template which express where facial features are located ordinarily (fig. 8, item 816) which is stored because it is part of the program/ system of fig. 2, and programs are stored in a memory (fig. 1, item 104).

Yamaguchi and Toyama are combinable because they are from the same field of endeavor, facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use a relational aspect to help find a face.

The suggestion/motivation for doing so would have been to provide a more automatic, efficient and reliable face detection method, especially in the case of illumination changes.

Therefore, it would have been obvious to combine the facial image processing of Yamaguchi with the relational facial recognition of Toyama to obtain the invention as specified in claim 1.

13. Claim 41 is rejected for the same reasons as claim 1. Thus, the arguments analogous to that presented above for claim 1 are equally applicable to claim 41. Claim 41 distinguishes from claim 1 only in that claim 1 claims a method and claim 41 claims a computer readable medium with a program. Toyama teaches further this feature (col. 4, line 62- col. 5, line 10).

14. Claims 85 and 99 are rejected for the same reasons as claims 1 and 41, respectively. Thus, the arguments analogous to that presented above for claims 1 and 41 are equally applicable to claims 85 and 99. Claims 85 and 99 distinguish from claims 1 and 41 only in that claims 85 and 99 omit the limitation of "a relationship between two or more facial features" and adds the option of modification as spatial parameters of the face. Since Toyama also discloses ii) a correlation with a stored standard (as explained in the claim rejection above), and Yamaguchi discloses color balance modification, prior art applies.

15. Regarding claims 81 and 83, Yamaguchi discloses one or more new still images comprise a plurality of new still images since many images are generated to get the composed corrected data, including the background image, the skin image, the changed image size image, etc (fig. 11)

16. Claims 23, 63, 82, 84, 92, 106 and 112 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama, as applied to claims 1, 41, 85 and 99 above, and further in view of U.S. Patent Application Publication No. 20040095359 (Simon et al).

Claims 23, 63, 92 and 106 are rejected for the same reasons as claims 1, 41, 85 and 99, respectively. Thus, the arguments analogous to that presented above for claims 1, 41, 85 and 99 are equally applicable to claims 23, 63, 92 and 106. Claims 23, 63, 92 and 106 distinguishes from claims 1, 41, 85 and 99 only in that they automatically provide an option for generating new values. Simon et al teaches further this feature, i.e. providing options to the user for generating new values (fig. 1, step 102 and 104)

Yamaguchi (as modified by Toyama et al are combinable because they are from the same field of endeavor, i.e. processing facial images.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to automatically provide an option.

The suggestion/motivation for doing so would have been to provide a more user-friendly system by allowing them to access their preferences.

Therefore, it would have been obvious to combine Yamaguchi (as modified by Toyama) with the option of Simon et al to obtain the invention as specified in claims 23, 63, 92 and 106.

17. Regarding claims 82, 84 and 112, Yamaguchi discloses one or more new still images comprise a plurality of new still images since many images are generated to get

the composed corrected data, including the background image, the skin image, the changed image size image, etc (fig. 11)

18. Claims 2-5, 42-45, 86-69, and 100-103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama, and further in view of U.S. Patent No. 4970663 (Bedell et al).

19. Regarding claim 2, Yamaguchi (as modified by Toyama) discloses all of the claimed elements as set forth above and incorporated herein by reference. Yamaguchi further discloses Yamaguchi further discloses displaying the original image (page 3, paragraph 48) and displaying the final image (fig. 11, s234). Thus, Yamaguchi discloses displaying a transformation between these images since both images are displayed.

Yamaguchi (as modified by Toyama) does not disclose expressly the gradual display of the transformation.

Bedell et al discloses displaying another type of transformation between the images when disclosing that images can be dissolved from one image to another (col. 4, lines 19-20).

Yamaguchi (as modified by Toyama) and Bedell et al are combinable because they are from the same field of endeavor, i.e. manipulating images.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to display a gradual transformation.

The suggestion/motivation for doing so would have been to provide a more user friendly system by allowing the user a pleasing way to view the transformation.

Therefore, it would have been obvious to combine Yamaguchi (as modified by Toyama) with the gradual display of Bedell et al to obtain the invention as specified in claim 2.

20. Regarding claim 3, Yamaguchi discloses adjusting parameters, color parameters (page 5, paragraph 85), of said transformation between the original image and the new image. Bedell discloses other parameters, as seen in the rejection for claim 4, below.

21. Regarding claim 4, Bedell et al discloses that parameters of said transformation between images are being selected from a set of criteria including timing, the number of frames it takes to dissolve and blending, the blending of the frames as one frame dissolves into another (col. 4, lines 21-25).

22. Regarding claim 5, Bedell et al discloses blending includes dissolving (col. 4, lines 19-20).

23. Claims 42-45 are rejected for the same reasons as claims 2-5, respectively. Thus, the arguments analogous to that presented above for claims 2-5 are equally applicable to claims 42-45. Claims 42-45 distinguishes from claims 2-5 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

24. Claims 86-89 are rejected for the same reasons as claims 2-5, respectively. Thus, the arguments analogous to that presented above for claims 2-5 are equally applicable to claims 86-89. Claims 86-89 distinguishes from claims 2-5 only in that they

have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

25. Claims 100-103 are rejected for the same reasons as claims 2-5, respectively. Thus, the arguments analogous to that presented above for claims 2-5 are equally applicable to claims 100-103. Claims 100-103 distinguishes from claims 2-5 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

26. Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (as modified by Toyama and Bedell et al) as applied to claims 5, 45, 89 and 103 above, and further in view of U.S. Patent No. 20030123751 (Krishnamurthy et al).

27. Regarding claim 6, Yamaguchi (as modified by Toyama and Bedell et al) discloses all of the claimed elements as set forth above and incorporated herein by reference.

Yamaguchi (as modified by Toyama and Bedell et al) does not disclose expressly that the selected portion further comprises a zoom region, and a new image comprising a zoomed image includes the face enlarged by zooming.

Krishnamurthy et al discloses a selected portion, or the region of interest (fig. 2, item 210), further comprises a zoom region, since the region of interest is zoomed in on, (fig. 2, item 240), and a new image comprising a zoomed image includes the face enlarged by the zooming (fig. 2, item 240), since the face is included in the region of interest (pg. 1, pp. 0009).

Yamaguchi (as modified by Toyama and Bedell et al) and Krishnamurthy et al are combinable because they are from the same field of endeavor, i.e. facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to have the capability of zooming in on the face.

The suggestion/motivation for doing so would have been more robust system by allowing images to be taken from far away.

Therefore, it would have been obvious to combine Yamaguchi (as modified by Toyama and Bedell et al) with the zooming of Krishnamurthy et al to obtain the invention as specified in claim 6.

28. Claim 46 is rejected for the same reasons as claim 6. Thus, the arguments analogous to that presented above for claim 6 are equally applicable to claim 46. Claim 6 distinguishes from claim 46 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

29. Claim 90 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama and Bedell et al, as applied to claim 89 above, and further in view of U.S. Patent No.6246779 (Fukui et al).

Regarding claim 90, Yamaguchi (as modified by Toyama and Bedell et al) discloses all of the claimed elements as set forth above, and incorporated herein by reference.

Yamaguchi (as modified by Toyama and Bedell et al) does not disclose expressly determining a point of rotation and an amount of rotation after which another image is automatically generated including a rotated version of the face.

Fukui et al discloses determining a point of rotation, a rotation pivot point (col. 7, line 31) and an amount of rotation theta (col. 7, line 40) after which another image is automatically generated including a rotated, transformed version of the face (col. 7, lines 41- col. 8, line 4).

Yamaguchi (as modified by Toyama and Bedell et al) and Fukui et al are combinable because they are from the same field of endeavor, i.e. facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to rotate the face.

The suggestion/motivation for doing so would have been to provide a more user-friendly system by providing a means to obtain a normalized version of the face which can be used in more effectively in many applications such as image matching, or simply be used as a better fit to the display.

Therefore, it would have been obvious to combine the method of Yamaguchi (as modified by Toyama and Bedell et al) with the rotation of Fukui et al to obtain the invention as specified in claim 90.

30. Claim 104 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama et al, and further in view of Fukui.

Regarding claim 104, Yamaguchi (as modified by Toyama) discloses all of the claimed elements as set forth above, and incorporated herein by reference.

Yamaguchi (as modified by Toyama) does not disclose expressly determining a point of rotation and an amount of rotation such that the generating of the values of the pixels automatically generates a new image including a rotated version of the face by rotating the image about said point of rotation by said amount of rotation.

Fukui et al discloses a step of determining a point of rotation, a rotation pivot point (col. 7, line 31) and an amount of rotation theta (col. 7, line 40) such that the generating of the values of the pixels automatically generates a new image, a transformed version of the face, including a rotated version of the face by rotating the image about said point of rotation by said amount of rotation (col. 7, lines 41- col. 8, line 4.

Yamaguchi (as modified by Toyama) and Fukui et al are combinable because they are from the same field of endeavor, i.e. facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to rotate the face.

The suggestion/motivation for doing so would have been to provide a more user-friendly system by providing a means to obtain a normalized version of the face which can be used in more effectively in many applications such as image matching, or simply be used as a better fit to the display.

Therefore, it would have been obvious to combine the method of Yamaguchi (as modified by Toyama) with the rotation of Fukui et al to obtain the invention as specified in claim 90.

31. Claims 7, 11, 47 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (as modified by Toyama, Bedell et al, and Krishnamurthy et al) and further in view of Fukui.

32. Claims 7 and 47 are rejected for the same reasons as claim 90. Thus, the arguments analogous to that presented above for claim 90 are equally applicable to claims 7 and 47. Claims 7 and 47 distinguish from claim 90 only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

33. Claims 11 and 51 are rejected for the same reasons as claim 104. Thus, the arguments analogous to that presented above for claim 104 are equally applicable to claims 11 and 51. Claims 11 and 51 distinguish from claim 104 only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

34. Claim 105 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama et al, as applied to claim 99 above, and further in view of U.S. Patent Application Publication No. 20030142209 (Yamazaki et al). Yamaguchi

(as modified by Toyama) discloses all of the claimed elements as set forth above and incorporated herein by reference.

Yamaguchi (as modified by Toyama) does not disclose expressly generating a panning sequence comprising a sequence of at least two of the original image and the one or more new images.

Yamazaki et la discloses generating of the values by generating one or more new images (fig. 2, items 3-3 to 3-5) each including a new group of pixels corresponding to the face, the face being shown in fig. 2, items 3-3 to 3-5 and the new group of pixels being the changes in the face in the new images, and further comprising the step of generating a panning sequence (pg. 2, pp. 21) which keeps the object of interest in the center, comprising a sequence of at least two of the original images (fig. 3, items 3-2 to 3-3) and the one or more new images (fig. 3-4).

Yamaguchi (as modified by Toyama) and Yamazaki et al are combinable because they are from the same field of endeavor, i.e. facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to pan in new images.

The suggestion/motivation for doing so would have been to provide a more user-friendly system by automatically following an object of interest instead of manually following, and to increase speed by following the object instead of asking the user to find the object when it moves.

Therefore, it would have been obvious to combine the method of Yamaguchi (as modified by Toyama) with Yamazaki et al to obtain the invention as specified in claim 105.

35. Claim 91 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama et al and Bedell, and further in view of Yamazaki et al.

Yamaguchi (as modified by Toyama and Bedell et al) discloses all of the claimed elements as set forth above and incorporated herein by reference.

Yamaguchi (as modified by Toyama and Bedell et al) does not disclose expressly (g) determining one or more further new images each including a new group of pixels corresponding to the face; and (h) automatically panning using the one or more further new images.

Yamazaki et al discloses determining one or more further new images each including a new group of pixels corresponding to the face by obtaining more images over time that include the face (fig. 3, item 3-3 to 3-5). And automatically panning using one or more further new images, as can be seen in items 3.3 to 3.5, since the person moves and the camera keeps the person in the center, thus panning (pg. 2, pp. 21).

Yamaguchi (as modified by Toyama and Bedell et al) and Yamazaki et al are combinable because they are from the same field of endeavor, i.e. facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to pan in new images.

The suggestion/motivation for doing so would have been to provide a more user-friendly system by automatically following an object of interest instead of manually following, and to increase speed by following the object instead of asking the user to find the object when it moves.

Therefore, it would have been obvious to combine the method of Yamaguchi (as modified by Toyama and Bedell et al) with Yamazaki et al to obtain the invention as specified in claim 91.

36. Claims 8, 9, 14-15, 48, 49, 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi in view of Toyama, Bedell, and Krishnamurthy, and further in view of Yamazaki et al.

37. Claims 8 and 14 are rejected for the same reasons as claims 91 and 105, respectively. Thus, the arguments analogous to that presented above for claims 91 and 105 are equally applicable to claims 8 and 14. Claims 8 and 14 distinguish from claims 91 and 105 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

38. Claims 48 and 54 are rejected for the same reasons as claims 91 and 105, respectively. Thus, the arguments analogous to that presented above for claims 91 and 105 are equally applicable to claims 48 and 54. Claims 48 and 54 distinguish from claims 91 and 105 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

39. Regarding claim 9, Yamazaki et al discloses each of the one or more further new images including pixels corresponding to features different from at least one other image of the one or more further new images, such features being the differences in the image from movement, such as the movement of the door and the pixels corresponding to the movement (fig. 3, items 3-2 to 3-5).

40. Claims 15, 49, and 55 are rejected for the same reasons as claim 9. Thus, the arguments analogous to that presented above for claim 9 are equally applicable to claims 15, 49, and 55. Claims 15, 49, and 55 distinguish from claim only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

41. Claims 10, 12, 13, 50, 52 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (as modified by Toyama, Bedell, Krishnamurthy) and further in view of Yamazaki, as applied to claims 8 and 48 and Fukui et al, as applied to claims 11 and 51.

Regarding claim 10, Yamaguchi (as modified by Toyama, Bedell, Krishnamurthy, and Yamazaki) discloses all of the claimed elements as set forth above, and incorporated herein by reference.

Yamaguchi (as modified by Toyama, Bedell, Krishnamurthy, and Yamazaki) does not disclose expressly determining a point of rotation and an amount of rotation after which another image is automatically generated including a rotated version of the face.

Fukui et al discloses determining a point of rotation, a rotation pivot point (col. 7, line 31) and an amount of rotation theta (col. 7, line 40) after which another image is automatically generated including a rotated, transformed version of the face (col. 7, lines 41- col. 8, line 4).

Yamaguchi (as modified by Toyama, Bedell, Krishnamurthy, and Yamazaki) and Fukui et al are combinable because they are from the same field of endeavor, i.e. facial image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to rotate the face.

The suggestion/motivation for doing so would have been to provide a more user-friendly system by providing a means to obtain a normalized version of the face which can be used in more effectively in many applications such as image matching, or simply be used as a better fit to the display.

Therefore, it would have been obvious to combine the method of Yamaguchi (as modified by Toyama, Bedell, Krishnamurthy, and Yamazaki) with Fukui et al to obtain the invention as specified in claim 10.

42. Claim 50 is rejected for the same reasons as claim 10. Thus, the arguments analogous to that presented above for claim 10 are equally applicable to claim 50. Claim 50 distinguishes from claim 10 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

43. Regarding claim 12, Yamaguchi (as modified by Toyama, Bedell et al, Krishnamurthy and Fukui et al) discloses all of the claimed elements as set forth above,

and incorporated herein by reference. Yamaguchi (as modified by Toyama, Bedell et al, Krishnamurthy and Fukui et al) does not disclose expressly (d) determining one or more further new images each including a new group of pixels corresponding to the face; and (e) automatically panning using the one or more further new images. Yamazaki et al discloses determining one or more further new images each including a new group of pixels corresponding to the face by obtaining more images over time that include the face (fig. 3, item 3-3 to 3-5). And automatically panning using one or more further new images, as can be seen in items 3.3 to 3.5, since the person moves and the camera keeps the person in the center, thus panning (pg. 2, pp. 21). Yamaguchi (as modified by Toyama, Bedell et al, Krishnamurthy and Fukui et al) and Yamazaki et al are combinable because they are from the same field of endeavor, i.e. facial image processing. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to pan in new images. The suggestion/motivation for doing so would have been to provide a more user-friendly system by automatically following an object of interest instead of manually following, and to increase speed by following the object instead of asking the user to find the object when it moves. Therefore, it would have been obvious to combine the method of Yamaguchi (as modified by Toyama, Bedell et al, Krishnamurthy and Fukui et al) with Yamazaki et al to obtain the invention as specified in claim 12.

44. Claim 52 is rejected for the same reasons as claim 12. Thus, the arguments analogous to that presented above for claim 12 are equally applicable to claim 52.

Claim 52 distinguishes from claim 10 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

45. Claims 13 and 53 are rejected for the same reasons as claim 9. Thus, the arguments analogous to that presented above for claim 9 are equally applicable to claims 13 and 53. Claim 13 and 53distinguish from claim 9 only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

46. Claims 32, 33, 72, 73, 98, 110 and 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama and Simon, as applied to claims 23 and 63 above, and further in view of Yamazaki et al.

47. Claims 32, 72, 98 and 110 are rejected for the same reasons as claim 14. Thus, the arguments analogous to that presented above for claim 14 are equally applicable to claims 32, 72, 98 and 110. Claims 32, 72, 98 and 110 distinguish from claim 14 only in that claims 32, 72, 98 and 110 provide options for continuing processing. Simon teaches further this feature, as discussed above.

48. Claims 33, 73 and 111 are rejected for the same reasons as claim 9. Thus, the arguments analogous to that presented above for claim 9 are equally applicable to claims 33, 73 and 111. Claims 33, 73 and 111 distinguish from claim only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

49. Claims 29, 69, 96 and 107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama and Simon, as applied to claims 23 and 63 above, and further in view of Fukui.

50. Claims 29, 69, 96 and 107 are rejected for the same reasons as claim 11. Thus, the arguments analogous to that presented above for claim 11 are equally applicable to claims 29, 69, 96 and 107. Claims 29, 69, 96 and 107 distinguishes from claim 11 only in that claims 29, 69, 96 and 107 provide an option to generate a new image. Simon teaches further this feature, as discussed above.

51. Claims 30-31, 70-71, 97 and 108-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama, Simon and Fukui, as applied to claims 23 and 63 above, and further in view of Yamazaki et al.

52. Claims 30, 70, 97 and 108 are rejected for the same reasons as claim 12. Thus, the arguments analogous to that presented above for claim 12 are equally applicable to claims 30, 70, 97 and 108. Claims 30, 70, 97 and 108 distinguishes from claim 12 only in that claims 30, 70, 97 and 108 provide options for continuing processing. Simon teaches further this feature, as discussed above.

53. Claims 31, 71 and 109 are rejected for the same reasons as claim 9. Thus, the arguments analogous to that presented above for claim 9 are equally applicable to claims 31, 71 and 109. Claim 31, 71 and 109 distinguish from claim 9 only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

54. Claims 24, 64 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama and Simon, as applied to claims 23 and 63 above, and further in view of Krishnamurthy et al.

55. Claims 24, 64 and 93 are rejected for the same reasons as claim 6. Thus, the arguments analogous to that presented above for claim 6 are equally applicable to claims 24, 64 and 93. Claims 24, 64 and 93 distinguish from claim 6 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

56. Claims 25, 65 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama, Simon and Krishnamurthy, as applied to claims 24, 64 and 93 above, and further in view of Fukui.

57. Claims 25, 65 and 94 are rejected for the same reasons as claim 7. Thus, the arguments analogous to that presented above for claim 7 are equally applicable to claims 25, 65 and 94. Claims 25, 65 and 94 distinguish from claim 7 only in that they have different dependencies, both of which have been previously rejected. Therefore, prior art applies.

58. Claims 26, 27, 66, 67 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama, Simon and Krishnamurthy, as applied to claims 24, 64 and 93 above, and further in view of Yamazaki et al.

59. Claims 26, 66 and 95 are rejected for the same reasons as claim 8. Thus, the arguments analogous to that presented above for claim 8 are equally applicable to claims 26, 66 and 95. Claims 26, 66 and 95 distinguishes from claim 8 only in that claims 26, 66 and 95 provide options for continuing processing. Simon teaches further this feature, as discussed above.

60. Claims 27 and 67 are rejected for the same reasons as claim 9. Thus, the arguments analogous to that presented above for claim 9 are equally applicable to claims 27 and 67. Claims 27 and 67 distinguish from claim only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

61. Claims 28 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi et al in view of Toyama, Simon, Krishnamurthy, and Yamazaki as applied to claims 26 and 66 above, and further in view of Fukui.

62. Claims 28 and 68 are rejected for the same reasons as claim 10. Thus, the arguments analogous to that presented above for claim 10 are equally applicable to claims 28 and 68. Claims 28 and 68 distinguish from claim 10 only in that they have different dependencies, all of which have been previously rejected. Therefore, prior art applies.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHLEEN S. YUAN whose telephone number is (571)272-2902. The examiner can normally be reached on Monday to Thursdays, 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571)272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Jingge Wu/
Supervisory Patent Examiner, Art Unit 2624

KY
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